DOE Wind Report Shows Banner Year, Rising Costs

The latest Department of Energy annual report on wind energy finds that the renewable resource is still competitive with other generating sources, although installation costs—and therefore electricity costs—remain on the rise.

The annual report, now titled "Wind Technologies Market Report," contains a large amount of new data on wind power project price and performance trends, highlighting and analyzing AWEA's wind power project installation data reported earlier in the year in AWEA's Annual Wind Industry Report. Prepared by Lawrence Berkeley National Laboratory (LBNL) and authored by Ryan Wiser and Mark Bolinger, the DOE report also looks at manufacturing facility data, which is tracked jointly by AWEA and the National Renewable Energy Laboratory (NREL).

Wind projects accounted for 42% of all new electric generating capacity added in the U.S. in 2008, and wind now delivers nearly 2% of the nation's electricity supply. U.S. wind power capacity additions increased by 60% in 2008, representing a $16 billion investment in new wind projects. "At this pace, wind is on a path to becoming a significant contributor to the U.S. power mix," said Wiser.

The need for the annual report has become apparent in the past few years, as the wind power industry has entered an era of unprecedented growth, both globally and in the U.S., LBNL said. At the same time, the last year has been one of upheaval, with the global financial crisis impacting near-term growth prospects for the wind industry, and with federal policy changes enacted to push the industry towards continued aggressive expansion. "With the market evolving at such a rapid pace, keeping up with trends in the marketplace has become increasingly difficult," said Bolinger. "Yet, the need for timely, objective information on the industry and its progress has never been greater…this report seeks to fill this need."

Some of the key findings from the just-released 2008 edition include:

• Wind turbine prices and installed project costs continued to increase into 2008. Near the end of 2008 and into 2009, however, turbine prices have weakened in response to reduced demand for wind due to the financial crisis.

• Wind project performance has improved over time, but has leveled off in recent years. The longer-term improvement in project performance has been driven in part by taller towers and larger rotors, enhanced project siting, and technological advancements.

• Wind remained economically competitive in 2008. Despite rising project costs, in recent years wind has consistently been priced at or below the price of conventional electricity, as reflected in

wholesale power prices. With wholesale prices plummeting in recent months, however, the economic position of wind in the near term has become more challenging.

• Expectations are for a slower 2009, in large part due to the global recession. Projections among industry prognosticators range from 4,400 MW to 6,800 MW of wind likely to be installed in the U.S. this year. Most predictions show market resurgence in 2010 and continuing for the immediate future.

The report is available at http://eetd.lbl.gov/ea/ems/re-pubs.html.

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